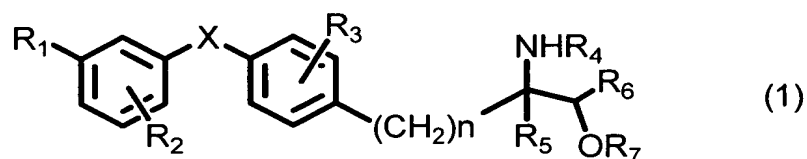


# CLAIMS

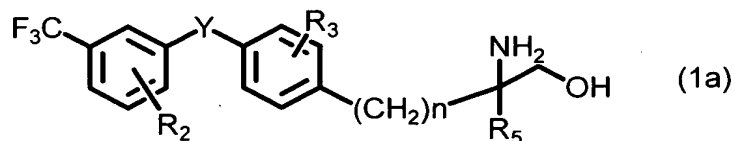
1. An amino alcohol derivative, and an optical isomer, pharmaceutically acceptable salt and hydrate thereof, the amino alcohol derivative represented by the following general formula (1):



[wherein  $R_1$  is a halogen atom, a trihalomethyl group, a lower alkyl group having 1 to 4 carbon atoms, an aralkyl group, a lower alkoxy group having 1 to 4 carbon atoms, a substituted or unsubstituted phenoxy group, a substituted or unsubstituted aralkyloxy group, a lower alkylthio group having 1 to 4 carbon atoms, a lower alkylsulfinyl group having 1 to 4 carbon atoms, or a lower alkylsulfonyl group having 1 to 4 carbon atoms;  $R_2$  is a hydrogen atom, a halogen atom, a trihalomethyl group, a lower alkyl group having 1 to 4 carbon atoms, an aralkyl group, a lower alkoxy group having 1 to 4 carbon atoms, or a aralkyloxy group;  $R_3$  is a hydrogen atom, a halogen atom, a trifluoromethyl group, a lower alkoxy group having 1 to 4 carbon atoms, a benzyloxy group, a lower alkyl group having 1 to 4 carbon atoms, or a lower alkoxythio group having 1 to 4 carbon atoms;  $R_4$  is a hydrogen atom, a lower alkyl group having 1 to 4 carbon atoms, a phenyl group, a substituted or

unsubstituted benzyl group, a lower aliphatic acyl group  
 having 1 to 5 carbon atoms, or a substituted or unsubstituted  
 benzoyl group;  $R_5$  is a hydrogen atom, a monohalogenated methyl  
 group, a lower alkyl group having 1 to 4 carbon atoms, a lower  
 5 alkoxymethyl group having 1 to 4 carbon atoms, a lower  
 alkylthiomethyl group having 1 to 4 carbon atoms, a  
 hydroxyethyl group, a hydroxypropyl group, a phenyl group, an  
 aralkyl group, a lower alkenyl group having 2 to 4 carbon  
 atoms, or a lower alkynyl group having 2 to 4 carbon atoms;  $R_6$   
 10 and  $R_7$  are each independently a hydrogen atom, or a lower alkyl  
 group having 1 to 4 carbon atoms; and X is O, S, SO, or SO<sub>2</sub>;  
 and n is an integer from 1 to 4].

2. The amino alcohol derivative according to claim 1, an  
 15 optical isomer, pharmaceutically acceptable salt or hydrate  
 thereof, wherein the compound represented by the general  
 formula (1) is represented by the following general formula  
 (1a):



20 [wherein Y represents O or S, and  $R_2$ ,  $R_3$ ,  $R_5$  and n are as  
 described above].

3. The amino alcohol derivative according to claim 2, an  
 optical isomer, pharmaceutically acceptable salt or hydrate

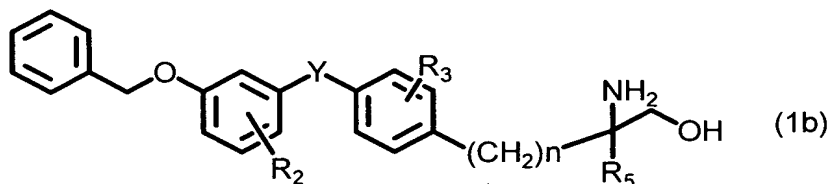
thereof, wherein  $R_3$  is a chlorine atom.

4. The amino alcohol derivative according to claim 2, an optical isomer, pharmaceutically acceptable salt or hydrate

5 thereof, wherein  $R_3$  is a trifluoromethyl group.

5. The amino alcohol derivative according to claim 1, an optical isomer, pharmaceutically acceptable salt or hydrate thereof, wherein the compound represented by the general

10 formula (1) is represented by the following general formula (1b):



[wherein Y represents O or S, and  $R_2$ ,  $R_3$ ,  $R_5$  and n are as described above].

15 6. The amino alcohol derivative according to claim 5, an optical isomer, pharmaceutically acceptable salt or hydrate thereof, wherein  $R_3$  is a chlorine atom.

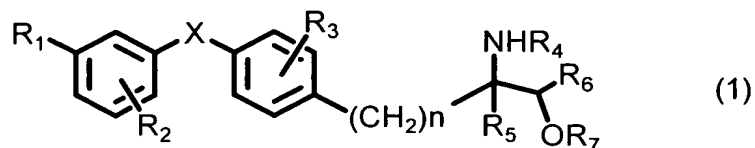
20 7. The amino alcohol derivative according to claim 5, an optical isomer, pharmaceutically acceptable salt or hydrate thereof, wherein  $R_3$  is a trifluoromethyl group.

8. The amino alcohol derivative according to claim 1, a pharmaceutically acceptable salt or hydrate thereof, wherein the compound of the general formula (1) is

- 1)  $(\pm)$ -2-amino-5-[4-(3-benzyloxyphenylthio)-2-chlorophenyl]-2-methylpentane-1-ol;
- 2)  $(+)$ -2-amino-5-[4-(3-benzyloxyphenylthio)-2-chlorophenyl]-2-methylpentane-1-ol;
- 3)  $(\pm)$ -2-amino-5-[4-(3-benzyloxyphenylthio)-2-chlorophenyl]-2-ethylpentane-1-ol;
- 4)  $(+)$ -2-amino-5-[4-(3-benzyloxyphenylthio)-2-chlorophenyl]-2-ethylpentane-1-ol;
- 5)  $(\pm)$ -2-amino-4-[4-(3-benzyloxyphenylthio)-2-chlorophenyl]-2-methylbutane-1-ol;
- 6)  $(+)$ -2-amino-4-[4-(3-benzyloxyphenylthio)-2-chlorophenyl]-2-methylbutane-1-ol;
- 7)  $(\pm)$ -2-amino-4-[4-(3-benzyloxyphenylthio)-2-chlorophenyl]-2-ethylbutane-1-ol;
- 8)  $(-)$ -2-amino-4-[4-(3-benzyloxyphenylthio)-2-chlorophenyl]-2-ethylbutane-1-ol; or
- 9) 3-amino-6-[4-(3-benzyloxyphenylthio)-2-chlorophenyl]hexane-2-ol.

9. An immunosuppressive agent containing as an active ingredient at least one of an amino alcohol derivative, and an optical isomer, pharmaceutically acceptable salt and hydrate

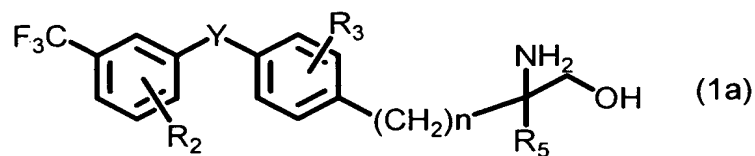
thereof, the amino alcohol derivative represented by the following general formula (1):



[wherein R<sub>1</sub> is a halogen atom, a trihalomethyl group, a lower  
 5 alkyl group having 1 to 4 carbon atoms, an aralkyl group, a  
 lower alkoxy group having 1 to 4 carbon atoms, a substituted  
 or unsubstituted phenoxy group, a substituted or unsubstituted  
 aralkyloxy group, a lower alkylthio group having 1 to 4 carbon  
 atoms, a lower alkylsulfinyl group having 1 to 4 carbon atoms,  
 10 or a lower alkylsulfonyl group having 1 to 4 carbon atoms; R<sub>2</sub>  
 is a hydrogen atom, a halogen atom, a trihalomethyl group, a  
 lower alkyl group having 1 to 4 carbon atoms, an aralkyl group,  
 a lower alkoxy group having 1 to 4 carbon atoms, or a  
 aralkyloxy group; R<sub>3</sub> is a hydrogen atom, a halogen atom, a  
 15 trifluoromethyl group, a lower alkoxy group having 1 to 4  
 carbon atoms, a benzyloxy group, a lower alkyl group having 1  
 to 4 carbon atoms, or a lower alkoxythio group having 1 to 4  
 carbon atoms; R<sub>4</sub> is a hydrogen atom, a lower alkyl group having  
 1 to 4 carbon atoms, a phenyl group, a substituted or  
 20 unsubstituted benzyl group, a lower aliphatic acyl group  
 having 1 to 5 carbon atoms, or a substituted or unsubstituted  
 benzoyl group; R<sub>5</sub> is a hydrogen atom, a monohalogenated methyl  
 group, a lower alkyl group having 1 to 4 carbon atoms, a lower

alkoxymethyl group having 1 to 4 carbon atoms, a lower alkylthiomethyl group having 1 to 4 carbon atoms, a hydroxyethyl group, a hydroxypropyl group, a phenyl group, an aralkyl group, a lower alkenyl group having 2 to 4 carbon atoms, or a lower alkynyl group having 2 to 4 carbon atoms;  $R_6$  and  $R_7$  are each independently a hydrogen atom, or a lower alkyl group having 1 to 4 carbon atoms; and X is O, S, SO, or SO<sub>2</sub>; and n is an integer from 1 to 4].

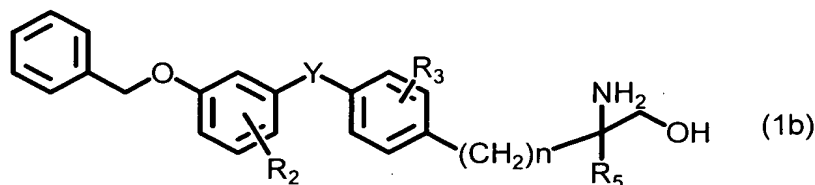
10. The immunosuppressive agent according to claim 9, containing as an active ingredient at least one of the amino alcohol derivative, and the optical isomer, pharmaceutically acceptable salt and hydrate thereof wherein the compound represented by the general formula (1) is represented by the following general formula (1a):



[wherein Y represents O or S, and  $R_2$ ,  $R_3$ ,  $R_5$  and n are as described above].

11. The immunosuppressive agent according to claim 9, containing as an active ingredient at least one of the amino alcohol derivative, and the optical isomer, pharmaceutically acceptable salt and hydrate thereof, wherein the compound

represented by the general formula (1) is represented by the following general formula (1b):



[wherein Y represents O or S, and R<sub>2</sub>, R<sub>3</sub>, R<sub>5</sub> and n are as described above].

12. The immunosuppressive agent according to any one of claims 9 to 11, intended for use as a prophylactic or therapeutic agent for autoimmune diseases.

13. The immunosuppressive agent according to any one of claims 9 to 11, intended for use as a prophylactic or therapeutic agent for rheumatoid arthritis.

14. The immunosuppressive agent according to any one of claims 9 to 11, intended for use as a prophylactic or therapeutic agent for psoriasis or atopic dermatitis.

15. The immunosuppressive agent according to any one of claims 9 to 11, intended for use as a prophylactic or therapeutic agent for bronchial asthma or pollinosis.

16. The immunosuppressive agent according to any one of

claims 9 to 11, intended for use as a prophylactic or therapeutic agent for rejection in organ or bone marrow transplantation.